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THE WHO, WHAT AND HOW OF SOCIAL MEDIA EXPLOITATION FOR A COMBATANT COMMANDER. In phase zero, the CCDR's intelligence directorate (J2) should exploit social media to enhance understanding of a state's population, part of factor space, to better forecast a state's level of stability. The expansion of social media platforms and devices that allow easy access to these platforms have created a new source of intelligence information. Social media platforms such as Facebook, Twitter and YouTube provide users with the ability to create, disseminate, share and access information from almost anywhere in the world in real time, on any subject one may have an interest. The recent revolution in Egypt demonstrates how social media platforms were used to plan and direct the protests that led to the downfall of President Mubarak. The Egyptian case highlights important observations on how a CCDR and his J2 can best exploit social media platforms. In order to exploit social media the J2 must build a robust JIPOE on social media platforms to identify the platforms that people in a country of interest use. The J2 must identify PIRs and warning indicators that social media can answer. A robust collection plan must be designed, as well as a strategy for exploitation of social media. Finally, the exploited information needs to be analyzed in order to answer PIRs or warning indicators. Social media is an untapped intelligence source. A well planned collection strategy will enable a CCDR to effectively exploit social media, helping to better understand a state's security conditions.

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THE WHO, WHAT AND HOW OF SOCIAL MEDIA EXPLOITATION
FOR A COMBATANT COMMANDER

by

Jeremiah J. Burgess

Major, USAF

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

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Signature: _____

20 May 2013

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Abstract

THE WHO, WHAT AND HOW OF SOCIAL MEDIA EXPLOITATION FOR A COMBATANT COMMANDER (CCDR)

In phase zero, the CCDR's intelligence directorate (J2) should exploit social media to enhance understanding of a state's population, part of factor space, to better forecast a state's level of stability. The expansion of social media platforms and devices that allow easy access to these platforms have created a new source of intelligence information. Social media platforms such as Facebook, Twitter and YouTube provide users with the ability to create, disseminate, share and access information from almost anywhere in the world in real time, on any subject one may have an interest. The recent revolution in Egypt demonstrates how social media platforms were used to plan and direct the protests that led to the downfall of President Mubarak. The Egyptian case highlights important observations on how a CCDR and his J2 can best exploit social media platforms. In order to exploit social media the J2 must build a robust JIPOE on social media platforms to identify the platforms that people in a country of interest use. The J2 must identify PIRs and warning indicators that social media can answer. A robust collection plan must be designed, as well as a strategy for exploitation of social media. Finally, the exploited information needs to be analyzed in order to answer PIRs or warning indicators. Social media is an untapped intelligence source. A well planned collection strategy will enable a CCDR to effectively exploit social media, helping to better understand a state's security conditions.

Introduction

In early 2011, the Arab world underwent drastic upheaval as protest movements spread from country to country resulting in the downfall of governments in Egypt, Tunisia, and Libya and causing instability in Syria, Bahrain and other Arab states. Dubbed the "Arab Spring," the mass protests were primarily a people's movement that were partly organized and driven through the use of social media.[1] For example, Egyptian protesters used social media to organize protests and to maintain the momentum of the protest movement through the spread of information on the Egyptian regime's harsh response to the protests.[2] The Arab Spring demonstrates how the exploitation and analysis of social media can be used to assess the security situation within a country. Thus, as social media continues to proliferate as a means of communication, a Combatant Commander (CCDR) needs to understand the importance and usage of social media within his area of operations (AOR) to anticipate changes in the security environment. Specifically, in phase zero, the CCDR's intelligence directorate (J2) should exploit social media to enhance understanding of a state's population, part of factor space, to better forecast a state's level of stability.

Using the Egyptian protest as a case study, this paper will explore how the J2 can effectively integrate social media exploitation into a phase zero joint intelligence preparation of the operating environment (JIPOE). First, the paper will define social media and discuss social media platforms. Second, the paper will examine the Egyptian protests to understand the use of social media and why a CCDR should focus on it. This section will also offer observations that a J2 should be aware of when exploiting social media. Finally, the paper will explore how the J2

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[1] Jürgen Pfeffer and Kathleen M. Carley, "Social Networks, Social Media, Social Change," *In proceedings of the 2nd International Conference on Cross-Cultural Decision Making: Focus 2012, San Francisco, CA, July 21-25, 2012,* accessed 22 April 2013, http://www.casos.cs.cmu.edu/publications/papers/2012SocialNetworksSocialMediaSocialChange.pdf.

[2] Zeynep Tufekci and Christopher Wilson, "Social Media and the Decision to Participate in Political Protest: Observations From Tahrir Square," *Journal of Communication,* Volume 62, Issue 2 (March 6, 2012), accessed 25 April 2013, http://onlinelibrary.wiley.com/doi/10.1111/j.1460-2466.2012.01629.x/pdf.

can integrate social media information into JIPOE, specifically in an indications and warning (I&W) system used during phase zero.

Before continuing it is necessary to define the term stability since it is used throughout the paper. According to Merriam-Webster online dictionary the term 'stable' is defined as "firmly established; not changing or fluctuating; permanent, enduring."[3] Therefore, when a state faces instability, changes are occurring that alter the status quo, possibly affecting the security environment. Instability may also encapsulate political factors such as the increase in protests/civil disobedience and crackdown on opposition political parties, economic factors such as resource shortages or rapid inflation, and/or social factors such as repression against minority groups. The paper will argue that social media can be exploited to better understand instability factors.

Caution

However, before CCDRs abandon traditional intelligence sources and fully integrate social media into JIPOE, several attributes of social media need to be understood to comprehend its limitations in providing an accurate picture of the operating environment. These attributes include who uses social media, the availability of social media, and the actual impact of social media in translating words into actions.

First, users of social media are not uniform from country to country or even within a specific country. According to a 2012 Pew Research study on the social media use in the U.S:

> Internet users under 50 are particularly likely to use a social networking site of any kind, and those 18-29 are the most likely of any demographic cohort to do so (83%). Women are more likely than men to be on these sites. Those living in urban settings are also significantly more likely than rural internet users to use social networking.[4]

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[3] *Merriam-Webster Online Dictionary*, s.v. "stable," accessed May 11 2013.
[4] Maeve Duggan and Joanna Brenner, "The Demographics of Social Media Users - 2012," Pew Internet and American Life Project, Pew Research Center, February 14, 2013, accessed 26 April 2013, http://pewinternet.org/Reports/2013/Social-media-users.aspx.

While this data is based on the population of the United States, similar observations have been made worldwide; users of social media tend to be young people under the age of 30. Older individuals' lack of usage excludes a significant portion of a country's population. Omand, Bartlett and Miller, intelligence analysts who write about the use of social media, identify this as a major problem of social media analysis since "when people are absent from a data set for a reason other than chance, they share a related and likely important trait(s) that could have a substantial impact on research findings."[5] The non-usage of social media by a large portion of a population reduces the certainty of assessing stability factors and may give a false reading if only relying on social media. However, in the future, today's young social media users will begin to move into positions of power and influence; thus the value of social media in understanding stability will likely increase. Moreover, as seen in Egypt, the impact of social media will magnify if youth have the ability to destabilize a government through mass protests.

In addition to age divisions, each country has a different level of social media usage. According to the Arab Social Media Report, Facebook usage in the Arab world was approximately 12% of the population in 2012. However, when broken down by country Turkey has the highest population of Facebook users at 1.02 million, while Iraq, a less stable country, only has 39,000 users.[6] The lack of usage in Iraq should cause the J2 to downplay the significance of Facebook in the stability assessment for Iraq, while it might be a significant factor when analyzing Turkey's stability. The varying levels of use in countries of interest should caution CCDR's from relying too heavily on social media data when assessing a country's stability. However, despite today's low usage in some countries, this should not cause the J2 to

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[5] David Omand, Jamie Bartlett, and Carl Miller, "Introducing Social Media Intelligence (SOCMINT)," *Intelligence & National Security,* 27, no. 6 (2012): 809, accessed March 12, 2013, http://search.proquest.com/docview/1239085575?accountid=322.
[6] Arab Social Media Report, Dubai School of Government's Governance and Innovation Program, accessed April 26, 2013, http://www.arabsocialmediareport.com/Facebook/LineChart.aspx?&PriMenuID=18&CatID=24&mnu=Cat.

ignore the importance of social media in future analysis. For example, from June 2011 to June 2012 Arab countries saw Facebook usage increase 50%, highlighting how fast usage is increasing, a rate that is likely to continue.[7]

The final caution with using social media as a source to measure stability is that words do not always translate into actions. Anthony Olcott, an intelligence expert on the use of open source information, cautions analysts that while they may understand the message, predicting the effect of that message is a challenge.[8] A message may be clear and concise, but the impact of that message on the population may be different than expected. A message may proliferate to a wide audience on social media such as calling for protests, however the actual individuals who join the protest may be minimal. The J2 must be cautious in taking social media at face value and must balance it with other intelligence sources. Despite this caution, words without actions are not always useless. The use of social media during the London riots of 2011 did not necessarily lead to more widespread protests, but it allowed the police to receive real time reports of ongoing activity allowing them to adjust their response.[9] The reporting ability of social media can provide the J2 with a better view of a situation leading to a better assessment.

With these caveats in mind, a CCDR must integrate social media into his stability assessment as its use continues to proliferate and becomes more important for communication. The rest of paper will explore how a CCDR and J2 should exploit social media to better assess stability.

What is Social Media?

The official Department of Defense (DoD) dictionary does not define social media; thus it is useful to define it in the context of this paper. Gupta and Brooks, analysts who specialize in

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[7] Ibid.

[8] Anthony Olcott. *Open Source Intelligence in a Networked World* (London and New York: Continuum, 2012), 198.

[9] David Omand et al, "Introducing Social Media Intelligence (SOCMINT)," 802.

the use of social media to address security issues, offer a useful definition of social media

emphasizing two key attributes, devices and platforms. They define social media as "devices and

platforms that allow users to create and share information with each other."[10] Devices are

necessary to access social media information. Initially, devices were limited to an internet

connected computer, but with the mass proliferation of smart phones people are now able to

access social media from almost anywhere. In 2012, 46% of all US social media users accessed

social media via smartphones, a jump from 37% in 2011, another trend that continues

worldwide.[11]

Gupta and Brooks define platforms as "the virtual spaces that allow users to come

together, and create and share information."[12] While understanding devices assists the J2 in

understanding how people access information, platforms are the medium where people interact;

creating, sharing and exchanging information. Thus, the J2 should focus on exploiting platforms.

Platforms can be divided into several categories; the two most common are social

networking platforms and media platforms. Social networking platforms emphasize relationships

and networks.[13] The most popular platforms include Facebook, Twitter, and LinkedIn. For

example, in March 2012 Egypt had 215,000 active Twitter users who sent 630,000 tweets. These

numbers continue to increase with Arabic becoming the fastest growing language in Twitter

history (English being the primary language).[14] Additionally, each country or region has its own

unique social network. The top social network site in Russia is called VKontakte, while

Facebook is the seventh most popular social network site.[15] A J2 must be aware of these local,

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[10] Ravi Gupta and Hugh Brooks, *Using Social Media for Global Security* (Indianapolis, IN: John Wiley & Sons, 2013), 18.
[11] Neilson Company, *State of the Media: The Social Media Report 2012,* accessed 26 April, 2013,
http://www.nielsen.com/us/en/reports/2012/state-of-the-media-the-social-media-report-2012.html.
[12] Gupta, *Using Social Media for Global Security*, 18.
[13] Ibid., 22-23.
[14] Arab Social Media Report.
[15] Comscore, "Russia has the World's Most Engaged Social Networking Audience," *Comscore Insights Press Releases*, July 2, 2009, accessed
April 27, 2013, http://www.comscore.com/Insights/Press_Releases/2009/7/Russia_has_World_s_Most_Engaged_Social_Networking_Audience.

national or language specific social networks since a large percentage of the population may operate on a platform that is unfamiliar in the U.S.

The next category is media platforms, which enable users to create and share media with others. YouTube, Flickr, and Instagram are some of the most well-known sites.[16] YouTube, a site that allows users to post videos, is the most popular with 1 billion unique visitors each month.[17] Videos include political commentary, captured video of real time newsworthy events and homemade movies that have varying levels of production quality. YouTube is a worldwide phenomenon with 70% of its traffic originating from outside the US.[18] YouTube is most often used for entertainment purposes, but as seen during the Arab Spring protests the site was used to disseminate real time video of political events. Videos shot with the protestors' smartphones and posted on YouTube allowed the world to get a first person view of what was happening on the ground.[19] When combined with other intelligence sources, media platforms can provide additional insight on a developing situation helping to understand what is occurring in a given country. Finally, similar to social networking sites, media platforms are often unique to each country.

With a good understanding of the definition of social media and an understanding of the platforms that people use to interact, it is now time to examine why a J2 might find this information useful.

Why Social Media? - Tahrir Square Case

An examination of the Egyptian uprising in the winter of 2011 highlights why a CCDR should exploit social media during phase zero. This case illustrates how the protestors used

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[16] Gupta, *Using Social Media for Global Security.* 24-25.
[17] YouTube Statistics, YouTube, accessed April 27, 2013, http://www.youtube.com/yt/press/statistics.html.
[18] Ibid.
[19] Philip N. Howard, Aiden Duffy, Deen Freelon, Muzammil Hussain, Will Mari, Marwa Mazaid, "Opening Closed Regimes: What Was the Role of Social Media During the Arab Spring?", *Project on Information Technology and Political Islam*, University of Washington, September 11, 2011, accessed May 12, 2013, http://pitpi.org/wp-content/uploads/2013/02/2011_Howard-Duffy-Freelon-Hussain-Mari-Mazaid_pITPI.pdf.

social media to facilitate the toppling of the Egyptian regime.   While many analysts argue that social media was not the primary cause of Egyptian President Hosni Mubarak's fall from power[20], the protesters use of social media should not be ignored. In order to examine the impact of social media on the Egyptian revolution this paper offers a brief overview of events while examining how social media was employed during the revolution. Finally, the paper will detail observations a J2 should learn from this case.

Throughout the revolt, social media played a major role. First, the death of Khalid Said, an Egyptian brutally beaten to death by Egyptian police, came to the attention of Egyptian Wael Ghonim while surfing Facebook from his office in Dubai. The horrific pictures of Khalid Said's dead body prompted Ghomin to create a Facebook page to highlight Egyptian police brutality. In the subsequent months over 250,000 followers joined his page, which soon transitioned into a forum that captured the frustration of living in an Egyptian police state.[21] In early January, inspired by the recent revolt in Tunisia, Ghomin's Facebook page and other social media sites called for protests against President Mubarak's regime, a call that thousands answered.[22]

On January 25, 2011, the protesters held their first major protest. Over the next eighteen days several hundred thousand Egyptians marched in Cairo and other Egyptian cities protesting the regime.[23] The Egyptian authorities used threats, negotiation tactics and tried to force an end to the protests, however they were unable to halt the protest's momentum. Finally, on February 11 2011, President Mubarak agreed to step down from power.[24]

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[20] Blake Hounshell, "Think Again Egypt," *Foreign Policy*, February 14, 2011, accessed April 24, 2013. http://www.foreignpolicy.com/articles/2011/02/14/think_again_egypt.

[21] Jennifer Preston, "Movement Began with Outrage and Facebook Page That Gave it an Outlet," *New York Times*, February 6, 2011, accessed April 24, 2013, http://www.nytimes.com/2011/02/06/world/middleeast/06face.html?pagewanted=print.

[22] Josen Antonio Vargas, "Spring Awakening: How an Egyptian Revolution Began on Facebook," *New York Times*, February 17, 2012, accessed April 24, 2013. http://www.nytimes.com/2012/02/19/books/review/how-an-egyptian-revolution-began-on-facebook.html?pagewanted=all.

[23] *Christian Science Monitor Online,* "Timeline of Egyptian Revolution," June 22, 2012, accessed April 26, 2013, http://www.csmonitor.com/World/Middle-East/2012/0622/Timeline-Egypt-s-revolution.

[24] *BBC News,* "Profile Hosni Mubarak," last updated April 13, 2013, accessed April 24, 2013, http://www.bbc.co.uk/news/world-middle-east-12301713.

During the protests social media played two major roles. The first is that the protestors used social media to stay informed of ongoing events and the government's reaction to the protest activity. The second and more important role was that social media was used to relay information to the outside world on events within Egypt.

During the demonstrations the protest organizers used social media, specifically Twitter and to a lesser extent Facebook, to provide real-time updates to other activists and protest leaders. Twitter provided updates on protest activity, identified the security force's response and discussed protest organizational issues. In Christopher Wilson's, an analyst at the UNDP Oslo Governance Centre, and Alexander Dunn's, an analyst at the Cairo Institute for Human Rights Studies, analysis on Twitter use during the protests, the authors identified, "that Twitter use by Egyptians coordinating protest communications was deliberate and well considered."[25] The protests organizers relied on Twitter to better facilitate the protests and keep other Egyptians informed of events. However, when interviewed, individual protesters stated that they relied more on face to face communication or phone calls rather than social media when communicating during the protests.[26] Wilson and Dunn's study highlight the importance of social media in organizing events, but downplays its impact when measuring the individual protestors' use of social media.

Social media's largest impact was in the international environment. The tweets, Facebook updates, and YouTube videos kept the world informed of events in Tahrir square.[27] Mainstream media sources relied on social media to understand the protests and to disseminate

[25] Christopher Wilson and Alexandra Dunn, "Digital Media in the Egyptian Revolution: Descriptive Analysis from the Tahrir Data Sets," *International Journal of Communication,* Volume 5 (2011), 1250, accessed April 23, 2013, http://ijoc.org.
[26] Ibid., 1259.
[27] Blake Hounshell, "The Revolution Will Be Tweeted: Life in the Vanguard of the Twitter proletariat, '*Foreign Policy*, July/August 2011, accessed April 26, 2013, http://www.foreignpolicy.com/articles/2011/06/20/the_revolution_will_be_tweeted.

information to their viewers and readers elsewhere in the world.[28] Social media kept the story of the protest alive and the first person narrative that social media provided enabled the international audience to put a human face on the protests.

Events in Egypt demonstrate why a CCDR and his J2 should exploit social media to better understand their AOR and provides several observations that a J2 should consider when exploiting social media.

The first observation is that the source of information is not necessarily important, rather it is the impact of that information when it is further disseminated or in social media terms goes viral. Initially, the photos of Khalid Said's dead body did not create an effect until Ghomin created his Facebook page which expanded the audience for Said's story.[29] Thus, a J2 should focus on tracking viral events rather than identifying the origins of an event.

The second observation is that social media is an international capability, thus a J2 must look beyond a specific country's borders when exploiting social media. Ghomin lived in Dubai when he built the Facebook page dedicated to Said, highlighting the international impact of social media.[30] Social media allows individuals to impact a state without actually living in that state. A J2 should not discount the impact of outside influences when analyzing social media.

A third observation is that while social media was a tool of the protest movement, it was not the sole method that unified the protesters. In a survey of protesters conducted by Zeynep Tufekci, a University of North Carolina Sociologist, and Christopher Wilson, the co-founder of the Engine Room a technology and advocacy research group, only 28.3% heard about the protests solely through Facebook, while 48.4% heard about the protests from face to face

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[28] Gilad Lotan, Erhardt Graeff, Mike Ananny, Devin Gaffney, Ian Pearce and Danah Boyd, "The Revolutions Were Tweeted: Information Flows During the 2011 Tunisian and Egyptian Revolutions," *International Journal of Communication,* Volume 5, 2011, 1400, accessed April 23, 2013, http://ijoc.org .
[29] Vargas, "Spring Awakening: How an Egyptian Revolution Began on Facebook."
[30] Preston, "Movement Began with Outrage and Facebook Page That Gave it an Outlet."

communication.[31] This data highlights how social media was an important factor in galvanizing the protestors, but was not the sole or even most important factor. Other social factors, such as existing resistance groups and person to person communication, cannot be ignored when analyzing the impact of social media on state security. As with all sources of intelligence social media cannot be used as a single source, rather it needs to be combined with other sources of intelligence to paint an accurate picture.

The fourth observation is that the exploitation of social media may only provide a small snapshot of activities. The protest organizers relied heavily on social media to orchestrate the protests, however as discussed above, individual protesters did not rely on social media to guide their activities during the protests. This highlights that the exploitation of social media may only provide insight into a small subset of a population, such as the organizers of an event, and that social media may not tell the full story since it may fail to capture the feelings or thoughts of the masses.

The final observation from this case and the most compelling reason for a J2 to monitor and exploit social media is to gain real time information on events. The textual reports, pictures and videos of events enable the J2 to get a better picture of a situation, adding to the overall assessment. Combining social media data with other intelligence sources will provide a more holistic picture of an event, keeping the CCDR informed on changing conditions within a country.

The Egyptian revolution highlights how social media was used to influence events and relay time critical information. Social media was used to ignite the protests, continue the protests momentum and to keep the world informed of events in Egypt. This case illustrates why

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[31] Zeynep Tufekci and Christopher Wilson, "Social Media and the Decision to Participate in Political Protest: Observations From Tahrir Square," *Journal of Communication*, Volume 62, Issue 2 (March 6, 2012), 370, accessed April 25, 2013, http://onlinelibrary.wiley.com/doi/10.1111/j.1460-2466.2012.01629.x/pdf.

a J2 needs to be concerned with monitoring and exploiting social media and offers some observations at which the J2 should be aware. Now that the what and why has been answered, it is time to analyze how a J2 should exploit social media.

How to exploit Social Media?

A J2 should use social media in a similar fashion as he uses other intelligence sources, however he must recognize the unique attributes of information exploited through social media. This section will explore how a J2 can exploit social media. First, is a discussion on how and why the J2 should write intelligence requirements and indication and warning (I&W) indicators that social media can answer. Second, follows a discussion on how a J2 can identify the social media platforms to exploit and add to a collection plan. Finally, the section will conclude with a discussion on who should analyze social media within the Intelligence community (IC).

The first step in exploiting social media is to ask the proper questions. The Joint planning process uses Critical Information Requirements (CCIRs) and its subset Priority Intelligence Requirements (PIRs) to ask questions that concern the operating environment. This process begins when a CCDR establishes CCIRs, which are the overarching information requirements that a CCDR has within his AOR.[32] CCIRs are designed to keep the CCDR informed of activities and actions within his AOR that may impact his theater campaign plan or specific operational plans. PIRs are questions that answer gaps in understanding of the adversary or operational environment.[33] PIRs are often military focused, however, to understand factors that concern stability issues, CCDRs must ensure PIRs encompass socio-economic issues such as political stability, economic volatility and social pressures.

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[32] Chairman of the Joint Chiefs of Staff, *Joint Publication 2-0: Joint Intelligence*. (Washington, DC, GPO, June 22, 2007), I-8.
[33] Ibid., I-8.

A way to track the status of the CCDR's CCIRs and PIRs is to establish an Indications

and Warning (I&W) system for an area of interest. JP 2.0 defines I&W as:

> Those intelligence activities intended to detect and report time-sensitive intelligence
> information on foreign developments that could involve a threat to the United States or
> allied and/or coalition military, political, or economic interests or to US citizens abroad.
> It includes forewarning of hostile actions or intentions against the United States, its
> activities, overseas forces, or allied and/or coalition nations.[34]

For example, the PACOM CCDR might have an I&W system that tracks the stability of the

North Korean government. In this case, the I&W system would not only track military matters

but would also factor in social, economic and political matters in order to assess stability.

I&W is built around a system of indicators. A single indicator may not be significant, but

when combined with other indicators it may provide warning of a pending crisis. For example,

in country X the loading of weapons at an ammo depot may not be a major indicator of pending

military action. However, when this activity occurs at the same time that all military leave is

canceled this might indicate that country X is a step closer to some type of military action.

When assessing a country's stability, indicators that provide insight into social, economic

and political factors must be created. As the J2 conducts JIPOE the attributes of the social,

economic and political system will be identified. These attributes can then be broken down into

indicators that contribute to the overall stability of a particular state. Indicators should be precise

and if possible measurable, although social, economic and political factors normally rely more

on qualitative analysis more than a quantitative measure.

Once PIRs and an I&W indicator list are created, the J2 must build a collection plan. The

collection plan should identify the various intelligence sources that will answer PIRs or

indicators. The standard collection plan includes requests for imagery, signals intelligence and a

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[34] Ibid., I-16

request for open source information. The collection plan is where the J2 should identify social media as a source of intelligence. To effectively target social media the J2 must identify the social media platforms that are used in a particular country; specifically identifying those that are most likely to contain information that can assist with answering PIRs or indicators.   For example, if a country does not have a large percentage of individuals who use Facebook, then this is not the platform that the J2 should focus. This should not be a static list; it should be revisited to account for changing social media habits, new platforms and new devices that may cause users to transition to new platforms.

To assist with identifying the appropriate social media platforms to collect and exploit, the J2 should examine social media through what Anthony Olcott, an expert on open source intelligence, calls his six qualities of information; volume, velocity, vector, veracity, verifiability, and vulgarity.[35] The following paragraphs will provide a brief overview of Olcott's qualities of information and discuss how the qualities can focus the collection, exploitation and analysis of social media platforms.

The first quality of information is volume. Olcott writes that the volume of information is immense and grows at a rapid pace every single day.[36] Parsing through the volume of information is a major challenge for an analyst, making it difficult to identify the best social media platforms to target. The large volume of information suggests that the majority of the information found on social media is probably not relevant to answering a PIR or indicator, making it difficult to focus exploitation efforts due to limited collection and analytical capability.

The second quality of information is velocity which concerns the speed at which information is produced and disseminated. Olcott writes that a consequence of velocity is that the

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[35] Olcott. *Open Source Intelligence in a Networked World,* 103-125.
[36] Ibid., 104-105.

lines between producers and consumers of information are blurred.[37] These lines mean that the

consumer is often also the producer of the information. A review of one's local news station

illustrates this new reality when the news station will highlight a newsworthy event, such as a

traffic accident, using video shot by a consumer. The speed of information requires a J2 to have

the ability to quickly access and analysis social media platforms in order to identify information

that meets the criteria for answering a PIR or indicator.

To best address volume and velocity a J2 needs to prioritize social media exploitation

against those platforms that provide the most relevant information to answer PIRs or indicators.

The J2's collection plan should include collection periodicity and identify how often a site

should be analyzed to ensure that information is passed in a timely manner. This will ensure that

only the most relevant social media platforms are exploited.

The next three characteristics are closely related; vector, veracity and verifiability. Olcott

writes that the vector (or flow) of information has changed from a top-down approach to a

system where anyone from bottom to top can produce information.[38] With everyone producing

information it becomes very difficult to determine the veracity of information and to determine

whether or not the information is verifiable.[39]   These characteristics are not new to intelligence.

For example, human intelligence analysts must always validate a source to determine whether or

not a source's information is true and verifiable.

The J2 must factor in these three characteristics when conducting JIPOE on social media

platforms to determine which platforms to target. It is critical to understand the vector in order to

identify who runs a platform and who provides information via that platform. For example, a

government run social media platform may not be useful for answering indicators that address

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[37] Ibid., 110-112.
[38] Ibid., 114.
[39] Ibid., 116-117.

social stability issues since the site will likely contain pro-government information. At the same time, a platform run by dissidents may contain a large amount of false information in order to help justify their cause, distorting the true feelings of the masses. Additionally, once social media information is collected, an analyst must also factor in the vector to determine the value of the information. If there is a question on the veracity of a given piece of information it may falsely activate an indicator. However, information does not have to be true to cause an effect. This creates even more challenges for the J2 since information that is known to be false may still cause instability.

The final characteristic of information is that it has become more vulgar. Olcott defines vulgar as "low, common and prurient."[40] He writes that the ease of producing and consuming information means that the large majority of information that exists today can be classified as vulgar.[41] The majority of vulgar information is irrelevant to answering a J2's questions. The positive aspect of the amount of vulgar information is that once a platform has been identified as containing mostly vulgar information, such as social media platform devoted to knitting, a J2 can eliminate the need to monitor that site. The negative is that in a period leading up to a crisis or during a crisis a vulgar site devoted to knitting may quickly become the opposition's communication method. Thus, the J2 needs to periodically review the list of vulgar social media platforms to ensure that they are not being used for different purposes than previously identified.

After using Olcott's six characteristics of information to identify and prioritize social media platforms that should be exploited, the next step is to task the collectors and analysts within the J2 or the broader Intelligence Community. A typical J2 has limited capacity to fully exploit and analyze social media platforms. Some work will be possible such as keyword

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[40] Ibid., 120.
[41] Ibid., 121-122.

searches or when automated systems are built to identify relevant information, but it is unlikely

that a J2 will have the organic ability to adequately analyze social media. To understand social

media an analyst must understand the language and culture of the targeted audience. For

example, a Syrian using Twitter is likely writing in Arabic, while using colloquialisms that may

only be used in tweets. This makes it difficult for an analyst to discern easily what is being said

without knowing how Syrians communicate on Twitter. For this reason the analysis of social

media will have to occur outside of the J2, likely within the greater IC where analysts have the

cultural knowledge to appropriately analyze the information. A possible location is the CIA's

Open Source Center (OSC).[42] If the OSC is already overtasked, a CCDR may need to utilize

private contractors or academic organizations to evaluate social media, particularly in areas that

may not be a high priority to US interests but meet a valid concern for a CCDR to monitor.

Conclusion and Recommendations

Each month more and more people are accessing social media platforms in order to

create, disseminate and access information. The proliferation of devices means that in the future

it is likely that social media platforms will be the primary source for most people to access

information, particularly in countries that do not have a robust mainstream media access. The

importance of social media is not diminishing, it is only increasing, and thus a CCDR has a

vested interest in exploiting social media in order to better understand his operating environment.

The case of the Egyptian revolution illustrates how social media was used as a tool to

rally individuals to support anti-Mubarak protests. Social media platforms helped to organize the

opposition and kept the world involved through real time updates. The case demonstrates how a

J2 can exploit social media to better understand stability issues. If the CCDR had an active social

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[42] Open Source Center description, CIA, accessed April 27, 2013, https://www.cia.gov/library/publications/additional-publications/the-work-of-a-nation/cia-director-and-principles/centers-in-the-cia.htm.

media monitoring program during the Arab Spring then the J2 may have had a better grasp on the growth of the opposition movements and better assessed the impact of the protest movements.

Within a CCDR's staff, the J2 has the responsibility to identify, collect, exploit and analyze information from social media platforms to inform the CCDR's situational awareness. The CCDR must ensure he has PIRs that cover social, economic and political issues. These factor space issues that concern the population are often difficult to collect via traditional intelligence but easy to answer with a robust social media collection and analysis plan. Additionally, a J2 must integrate social media input into an I&W program. The JIPOE process must identify which social media platforms should be exploited, followed by building a robust collection plan. Finally, the J2 must conduct both in-house and outsourced exploitation and analysis of social media. A J2 must think through the process described above, in order to effectively identify and exploit the appropriate social media platforms that best answer PIRs and indicators. These answers will provide a CCDR with a more concise picture of a state's stability, allowing him to better shape his AOR.

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